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(54) SYSTEM AND METHOD FOR AN
IF-SAMPLING TRANSCEIVER

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(76) Inventors: Jack P. Glas, Basking Ridge, NJ (US);
Vladimir L Prodanov, New
Providence, NJ (US)

(57) ABSTRACT

Correspondence Address:
GARDNER GROFF, P.C.
PAPER MILL VILLAGE, BUILDING 23
600 VILLAGE TRACE
SUITE 300
MARIETTA, GA 30067 (US)

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The present invention is directed toward a radio, and method for receiving radio frequency signals. The radio comprises an input signal at a first intermediate frequency, an intermediate sampling architecture, a quantizer and a baseband converter. The intermediate frequency sampling architecture comprises receiving the input signal, passing the first intermediate frequency signal through a first filter characterized by steep selectivity and narrow bandpass, converting the filtered signal to a second intermediate frequency and passing the second intermediate frequency signal through a second filter having a bandpass characteristic, but without the steep selectivity characterizing the first filter. The radio further comprises a third filter following the baseband conversion which filters out adjacent channel harmonics to obtain a wanted data signal.

